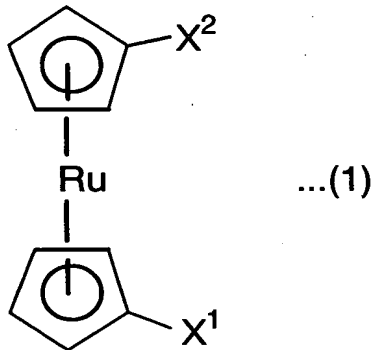


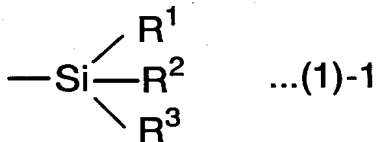
CLAIMS

1. A ruthenium compound for chemical vapor deposition which is at least one compound selected from the group consisting of a compound represented by the following formula

5 (1):



wherein X¹ and X² are each independently a hydrogen atom, fluorine atom, trifluoromethyl group, pentafluoroethyl group or group represented by the following formula (1)-1:



wherein R¹, R² and R³ are each independently a hydrocarbon group having 1 to 10 carbon atoms, with the proviso that X¹ and X² cannot be hydrogen atoms at the same time,

a compound represented by the following formula (2):



wherein R⁴ is a trifluoromethyl group or hydrocarbon group having 1 to 10 carbon atoms, and three R⁴'s may be the same or different,

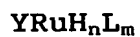
a compound represented by the following formula (3):



wherein Y is a cyclopentadienyl, cyclohexadienyl, cycloheptadienyl, cyclooctadienyl, butadienyl or

2,3-dimethyl-1,3-butadienyl group,

and a compound represented by the following formula (4):



(4)

wherein Y is as defined in the above formula (3), L is a
5 carbonyl group, methyl group or ethenyl group, n is an integer
of 1 to 4, and m is an integer of 0 to 2, with the proviso
that n + m is 3 or 4, and two L's may be the same or different
when m is 2.

- 10 2. A process for producing a metal ruthenium film from
the ruthenium compound of claim 1 by chemical vapor
deposition.